



Indiana State Department of Health

Epidemiology Resource Center

Quick Facts

About Hantavirus Pulmonary Syndrome

What is hantavirus pulmonary syndrome (HPS)?

Hantavirus pulmonary syndrome refers to an acute respiratory disease caused by the Sin Nombre virus. The disease was first identified in the Four Corners area (where borders of New Mexico, Arizona, Utah, and Colorado join) in 1993. There is evidence of people dying of the disease at least back to 1959. Indiana has had two cases of HPS identified since 1993. There are several other viruses that cause similar disease in the United States and in South America.

How is HPS spread?

The reservoir of Sin Nombre virus has been identified mainly as the deer mouse. Cotton rats, rice rats, and white footed mice each carry a virus that can cause HPS. While the rodents themselves are not ill, they can shed the virus in their saliva, droppings, and urine. Transmission to people occurs when:

1. People sweep or otherwise clean areas where rodent urine, droppings, and saliva are present and small droplets are "aerosolized" and inhaled.
2. Items contaminated with rodent urine, droppings, or saliva is handled and then hands touch the nose or mouth prior to washing hands.

What are the symptoms of HPS?

Individuals with HPS exhibit fatigue, muscle aches, headaches, dizziness, chills, nausea, vomiting, diarrhea, abdominal pain, fever, rapid difficult breathing, cough, rapid heartbeat, and sometimes low blood pressure. Symptoms generally appear about 1-5 weeks after exposure.

How do I know if I have HPS?

You cannot tell without seeing your health care provider. Your health care provider will review your symptoms, conduct a thorough physical examination, and might order chest x-rays and laboratory testing to confirm whether or not you have HPS.

How is HPS treated?

There is not a definitive treatment for HPS. Since the infection is caused by a virus, antibiotics are not effective. Supportive care in hospitals is usually necessary until the body's immune system overcomes the infection.

How is HPS prevented?

HPS is prevented by taking steps to reduce the exposure to rodent urine, droppings, and saliva. Steps that can be taken include:

1. Clean up around the outside of your home to remove shelter and breeding sites for rodents.
2. Rodent proof your house, garage, and other out buildings. Keep bird and pet food covered to prevent their use as food by rodents. Clean up spills immediately. Keep all foods and trash in rodent proof containers. Seal all holes $\frac{1}{4}$ inch or larger with wire screening or other rodent proof materials.
3. If you see evidence of rodent droppings or urine, clean the area with a "wet technique". Use a household disinfectant on the contaminated surfaces prior to trying to sweep or mop the area. Set traps. Use EPA approved rodent poisons following label directions.
4. Be sure to wash hands after handling or cleaning possibly contaminated surfaces. Wear a mask if sweeping areas where rodents have likely been.
5. Increase ventilation in areas where there is evidence of rodents before cleaning. This is helpful in reducing the amount of virus present and reduces the risk of transmission.

All information presented is intended for public use. For more information, please refer to:

<http://www.cdc.gov/hantavirus/index.html>

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